Tutorial for extracting data from a Statistics Canada CANSIM table

CANSIM tables provide users with wide access to Statistics Canada data covering a range of topics.

For this tutorial, let’s work look at crime, using the Incident-based crime statistics, by detailed violations.

1. The crime statistics CANSIM table number is 252-0051, which takes you to the main page.
2. Select the “Add/Remove data” tab to obtain a more detailed look that will allow us to drill down.

3. As you can see in “Step 2 – Select: Violations”, there are many violations from which to choose, making political bromides about being “tough on crime” nothing short of ridiculous. Use your browser’s vertical scroll bar to see the six steps, then scroll back up to the top. In each step, we can select aggregate numbers by only
selecting the top category in selections one through three.

4. In step four, you can select a date range.
5. In step five, you can determine the layout of the csv file that you will export and open in Excel.

6. Before we begin selecting an offence, it’s important to note that you can drill down in CANSIM tables using the steps in this tutorial, which is what makes them so useful for journalists working to deadline.

7. For the purposes of this tutorial, let’s look at offences for cannabis possession and compare the rates in Ottawa and Gatineau, two municipalities on opposite sides of the Ottawa river that, together, make up the National Capital Region.
8. Scroll back up to step one, and select “Ottawa-Gatineau, Quebec part” and “Ottawa-Gatineau, Ontario part”.

9. Expand the view in step two to scroll through the 258 violations, and de-select all the selections.
10. Using the “find” function on your keyboard, type the keyword “cannabis”.

11. Select “Possession, cannabis [4140].”
12. In step three, select “Actual incidents” and “Rate per 100,000 population.”

14. Leave the step-5 selection as is and select the “Apply” tab in step 6 to produce a table that looks like this.

![Table 252-0051](image.png)

15. Be sure to read the footnotes to obtain the fullest understanding of the data as possible. If you’re satisfied with what you have,
select the “Download” tab above the table.
16. Select the “Download data” tab, NOT “THE DOWNLOAD ENTIRE TABLE” tab.
17. Click the “Download file… “ link, and browse to the location on your hard drive where you want to keep the file.

18. Rename the file with a label that makes more sense, but be sure to save the CANSIM number in the new title.
19. Open the file.

20. Copy the CANSIM table’s URL into the first available cell in the first row and save the file. This csv table will be your original copy.
21. Use the “save as” option under “File” to save the csv file as an Excel workbook.

22. Once in Excel, select the table using your keyboard’s shortcut keys, open a new worksheet, and paste the table.
23. Now we can easily compare the two municipalities. While Ottawa had higher incident numbers for each of the six years in our date range (which makes sense, because it has more residents), Gatineau had a higher possession rate, which is easier to see if we apply the filter, and in column C, select “Rate per 100,000 population.”

24. If this is the result that you’d like to visualize in a bar chart, for instance, you can do so by copying this filtered table, and pasting it into a new csv or Excel file that can be uploaded to a program like infogram, or Google Fusion Tables.

25. To show that Gatineau’s rate has outpaced Ottawa’s you might want to use a line graph with the dates on the X-axis and the numbers on the Y-axis.